



NEW ZEALAND
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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NEWSLETTER



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RADIOCARBON DATES FOR NEW ZEALAND
ARCHAEOLOGICAL SITES

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Abstract

Some 300 N.Z. Laboratory radiocarbon dates have now been obtained for archaeological sites in New Zealand, most within the range of 0-1000 years. Different proportions and types of materials have been used in dating sites in the North and South Island.

INTRODUCTION

The recent interim listing of radiocarbon dates for N.Z. archaeological sites (Law, 1974) prompted the authors to compile a map showing the distribution of dates (and consequently dated sites). This is an attempt to present all N.Z. Laboratory dates obtained for archaeological sites up to December 1974; a number of dates are additional to Law's listing, and some persistently misquoted dates have been corrected. In contrast to the paper by McCulloch and Trotter (1975), no attempt has been made to assess the archaeological significance or validity of any one date; this is the sole responsibility of the collector. Our aim is simply to present a reference map for use by future workers; the archaeological significance of the overall distribution and range of dates we leave for others more qualified to assess.

A number of important points regarding the maps should be noted:

- (1) Only dates from the N.Z. Radiocarbon Laboratory, Institute of Nuclear Sciences, are presented.
- (2) All dates are calculated with respect to the 'old' half life of 5568 years.

- (3) Dates are presented without standard errors for simplicity; they should obviously be taken into account in any assessment of a date. Most errors may be obtained from the list compiled by Law (1974).
- (4) All dates obtained from an archaeological site are shown, although some of these obviously do not date the time of occupation, e.g. the 9000-year dates from Oturehua.

Any dates >1000 years B.P. should be treated with caution.

- (5) A number of previously unpublished dates are presented for the first time; we are indebted to the collectors (see acknowledgments) for permission to use these. Dates that have been obtained, but are either presently withheld by the collectors, or permission to use these has not been received by the time of publication, are indicated on the maps by an asterisk (although the dates have been used in compilation of Fig. 3).
- (6) The authors remain solely responsible for any errors associated with the maps. We would be pleased to hear of any additions or alterations that could be made and, if necessary, would be prepared to publish an amended version.

The distribution of radiocarbon dates and the material analysed is shown on the accompanying maps, Figs. 1 and 2. The range of dates for North and South Islands, and relative proportions of material analysed, is depicted in Fig. 3.

RANGE OF DATES AND MATERIAL ANALYSED

It is evident from examination of Fig. 3 that there are some definite differences between the North and South Islands in the number of dates obtained within certain periods, and in the types of material used for dating. These differences may be summarised as follows:

- (1) Fewer dates in the 0-200 year range from the South Island but a greater proportion in the 800-1000 year range.
- (2) Much greater use of charcoal for dating in the North Island; almost complete absence of bone dates.
- (3) Much greater use of bone (mainly moa) and shell for dating in the South Island.

Key to maps (Figs. 1 and 2)

All dates are in years B.P. (1950). Locality numbers refer to Tables 1 and 2.

c	= charcoal	fca	= fish bone carbonate
s	= shell	fco	= fish bone collagen
w	= wood	g	= grease
b	= moa bone	sb carb	= seal bone carbonate
hb	= human bone	sb coll	= seal bone collagen

Dates that have been obtained, but are presently 'unavailable', are shown by an asterisk.

Dates shown on these maps should not be used in interpretation of the age of a site or occupation layer without reference to previously published details of the date or, in the case of unpublished dates, to the collector.

Addendum - See Fig. 1.

Site N42/24-5 Wiri Mt., Manurewa
300c; 440c; 540c; 730c; 740c

All dates calculated wrt old half-life.

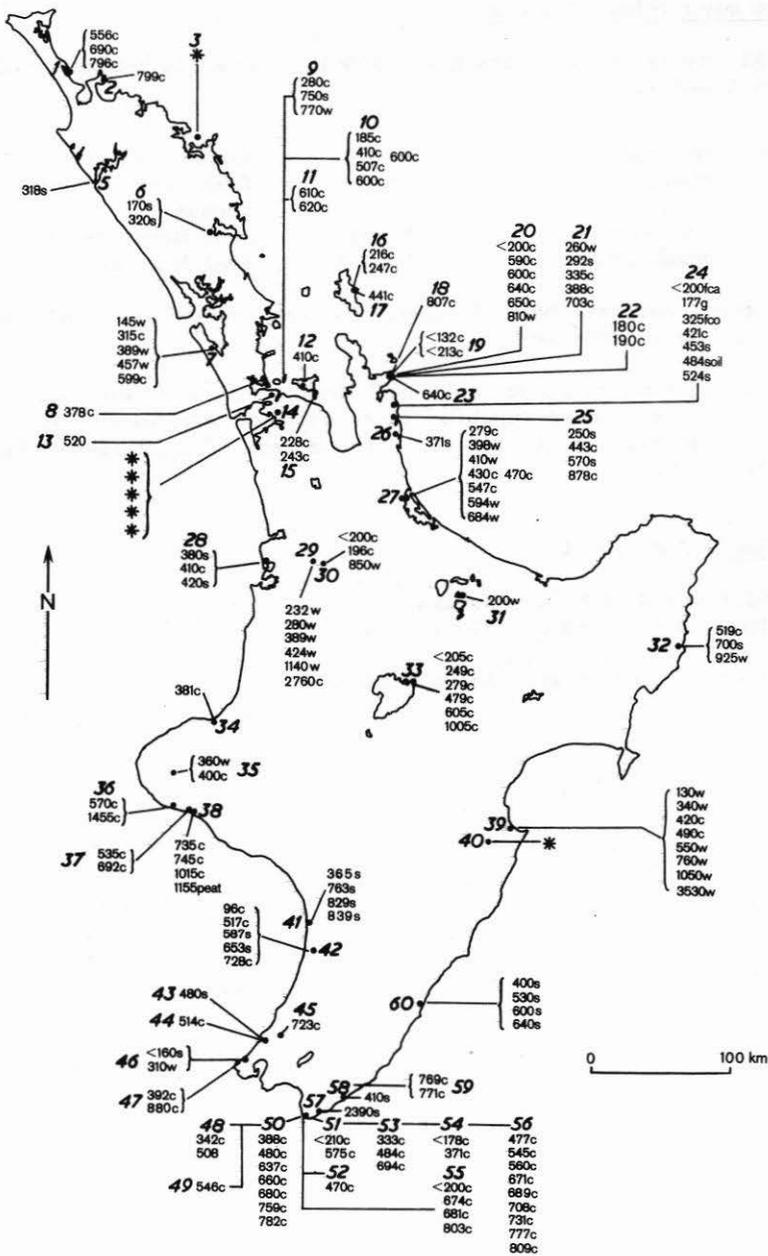


Fig. 1. - Map of North Island, showing distribution of radiocarbon dates.

TABLE 1: LIST OF NORTH ISLAND SITES (SEE FIG. 1)

<u>Number on map</u>	<u>Site Number</u>	<u>Locality</u>
1	N6/4	Houhora
2	N7/-	Karikari
3	N12/6	Moturua Island
5		Mangawhero Heads, Hokianga
6	N20/41	Ruarangi Pa
7	N37/37	Otakanini
8	N38/20	Castor Bay (Rahopara Pa)
9	N38/21	Pig Bay, Motutapu Island
10	N38/37	Station Bay, Motutapu Island
11	N38/24	Sunde site, Motutapu Island
12	N43/72	Rocky Bay, Waiheke Island (garden)
13	N42/4	Mt Wellington
14	N42/24-5	Wiri
15	N43/33	Galatea Bay, Ponui Island
16	N30/4	Harataonga Bay, Gt Barrier Island (eastern midden)
17	N30/3	Harataonga Bay, Gt Barrier Island (pa)
18	N40/7	Skippers Ridge, Opito
19	N40/73	Skippers Ridge, Opito
20	N40/9	Sarah's Gully settlement
21	N40/10	Sarah's Gully Pa
22	N40/16	Opito
23	N40/3	Mahinapua Bay
24	N44/69	Hot Water Beach
25	N44/2	Tairua
26	N49/-	Opoutere
27	N53-54/5	Kauri Point Swamp
28	N64	Aotea Harbour
29	N65/35	Mangakaware
30	N65/18	Lake Ngaroto
31	N76/-	Lake Okataina
32	B90/-	Tolaga Bay
33	B94/7	Whakamoenga Point, Lake Taupo
34	N99/9	Urenui
35	N119/22	Mt Egmont (oven)
36	N128/3	Kaupokonui R.
37	N129/78	Waingongoro R. (Te Rangatapu midden)
38	N128/77	Ohawe Beach

<u>Number on map</u>	<u>Site Number</u>	<u>Locality</u>
39	N135/1	Te Awanga
40	N141/-	Poukawa
41	N148/-	Tangimoana
42	N148/1	Foxton
43	N160/-	Pauatahanui
44	N160/50	Paremata
45	N161/1	Maymorn Ridge
46	N160/1	Warehou Pa, Makara
47	N160/3	Makara Beach
48	N168/20	Washpool (garden)
49	N168/21	Washpool (sea edge site)
50	N168/22	Washpool (midden)
51	N168/24	Washpool (raised rim pit/garden)
52	N168/27	Makotukutuku
53	N168/29	Makotukutuku (cross site)
54	N168/31	Makotukutuku (Titoki Pit)
55	N168/77	Black Rocks (middens)
56	N168/-	Palliser Bay Gardens
57	N168/-	White Rock
58	N169/-	Te Awaiti
59	N165/9	Moikau Valley, Whangamoana
60	*	*

TABLE 2: LIST OF SOUTH ISLAND SITES (SEE FIG. 2)

<u>Number on map</u>	<u>Site Number</u>	<u>Locality</u>
1	S7/1	Heaphy R.
2	S10/5	Durville Is.
3	S10/6	Durville Is.
4	S10/7	Durville Is.
5	S15/-	Whangamoa Beach
6	S14/1	Rotokura
7	S14/-	Motueka
8	S20/2	Tahunanui
9	S20/2	Tahunanui
10	S29/7	Wairau Bar
11	S24/8	Buller River mouth
12	S42/10	Clarence
13	S49/-	Parawhakatau
14	S55/19	Conway R.
15	S58/1	Kowhitirangi
16	S61/4	Timpendean
17	S61/20	Pentland Downs
18	S61/24	Glen Gynk
19	S62/10	Hurunui River mouth
20	S68/5	Teviotdale
21	S68/9	Motunau Is.
22	S68/29	Motunau Is.
23	S76/7	Hohoupounamu
24	S76/39	Kairaki
25	S84/76	Redcliffs
26	S84/77	Redcliffs
27	S93/20	Rakaia River mouth
28	S94/36	Takamatua
29	S100/5	Lake Pukaki
30	S103/1	Wakanui
31	S127/40	Awamoko
32	S117/3	Woolshed Flat, Upper Waitaki
33	S122/1	Dart Valley
34	S123/1	Dart Valley
35	S123/5	Dart Valley
36	S134/1	Oturehua
37	S136/1	Tai Rua, North Otago
38	S136/4	Awamoa
39	S136/2	Otatara
40	S140/2	Takahe Valley, Te Anau
41	S143/2	Hawkesburn Valley
42	S146/2	Waimataitai

<u>Number on map</u>	<u>Site Number</u>	<u>Locality</u>
43	S146/4	Katiki Point
44	S146/5	Shag Point
45	S146/16	Hampden
46	S155/5	Shag R.
47	S164/17	Kaikai Beach
48	S167/1	Lake Hauroko
49	S176/4	Wakapatu
50	S176/5	Tihaka
51	S176/1	Riverton
52	S184/1	Pounawea
53	S184/2	Hina Hina
54	S184/4	Cannibal Bay
55	S184/3	False Is.
56	S184/5	Papatowai
57	S184/7	Tautuku
58	S181/16	Tiwai Point
59	S189/6	Stewart Is.
60	S115/-	Glendhu Bay
61	S156, 157/-	Dusky Sound)
62	" "	Dusky Sound) Various sites
63	S164/16	Murdering Beach

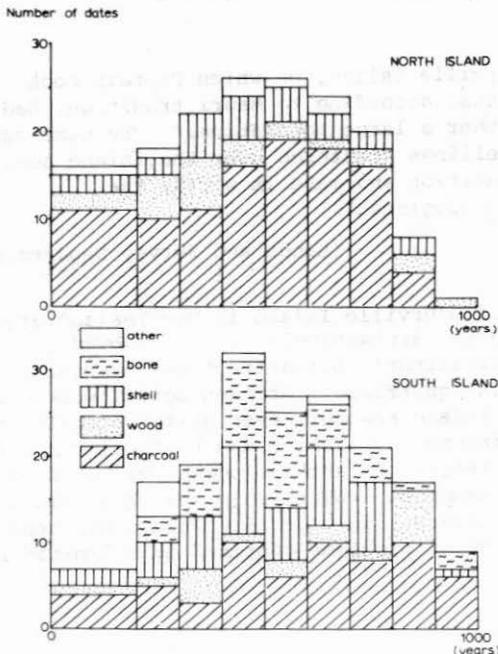


Fig. 3. - Histogram showing numbers of dates falling within 100-year periods, and the relative proportion of materials analysed.